

Thank you for purchasing the Fowler Twin Beam Electronic Height Gage.

Before using this tool for the first time, clean the surfaces of the two round columns (avoid getting lint in the two vertical racks), the scriber, scriber arm, and the bottom of the base to ensure all packing protectant is removed. Always make sure all measuring surfaces are clean before measuring. Prevent any fluids from coming in contact with the electronic housing and racks. Never apply voltage to the instrument, such as electronic engraving device. Be careful of the sharp edges and corners of the scriber. Be sure the carriage lock screw is loosened before traversing the measuring carriage either up or down, using the handwheel only, to prevent any damage to the racks and pinion. Avoid allowing debris from entering the electronic housing as well as the racks and pinion.



Twin Beam Electronic Height Gage

Function Buttons

- ON/OFF:** Turns the display on or off
- MM/IN:** Switches measuring mode between METRIC and INCH at any time
- RESET:** Sets "0" or preset value when in ABS mode
- ZERO/ABS:** Switches between Absolute and Incremental measuring modes. "0" is set whenever the display is switched from Absolute (no indication in display) to Incremental (INC indicated in the display)
- P+:** Allows positive incrementing of a preset value
- P-:** Allows negative incrementing of a preset value

Operation

Install the battery with the positive pole facing out and turn on the height gage. Initial power up should automatically start the gage in Absolute mode and in MM. Once all surfaces are clean, carefully mount the scriber to the underside of the scriber arm, secure with the scriber clamp then turn the handwheel to bring the scriber down to the reference surface and gently make contact without lifting the base off the reference surface. This should be performed more than once to ensure the reference point is correct and gaging pressure is consistent. Reference "0" should also be checked occasionally to ensure the datum has been maintained. Once in contact with the reference surface, press RESET to set a "0" datum. Once "0" is set you may decide whether or not to enter a preset value explained in the next section of this manual. If you require setting on another reference location, such as a gage block, you may use the preset function to enter the exact size of your reference master. When "0" has been established you are now prepared to measure. Move the carriage slightly past the surface to be measured. Move the scriber over the area to be measured and gently travel down to make contact in the same manner as setting the "0". Your measured value will be shown on the display.

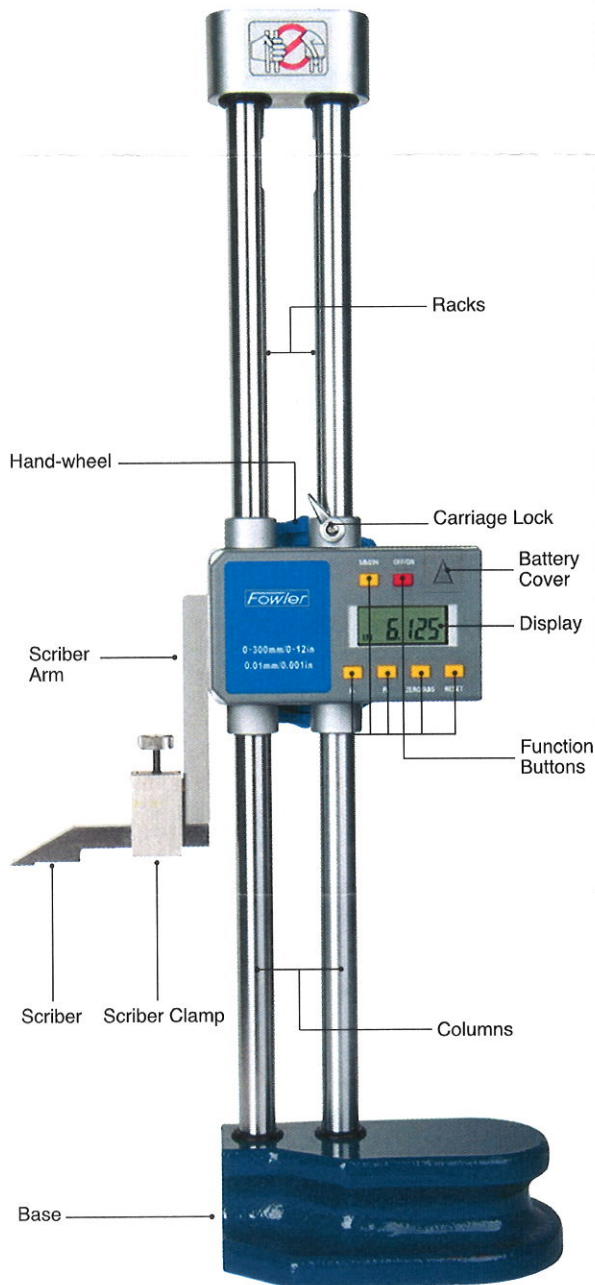
Preset Function

The preset function is only possible in the Absolute mode. If INC shows in the display press ZERO/ABS once to switch modes. This function is convenient when referencing off of a known master height, such as a gage block or setting gage.

To start, hold in both RESET and either P+ or P-. After several seconds "P" will flash in the upper portion of the digital display, release the buttons. Press and hold in either P+ or P- until the display starts to increment in value. The counting digits will increase in speed the longer you hold in the buttons. Once you arrive close to the value needed release the buttons. Hold in either button once again to slowly approach the number needed. When the value you require is shown in the display press RESET and the gage will exit the preset function. Now, whenever RESET is pressed the preset value will be displayed. To reset the ABS value to "0", start this procedure again until all digits are set back to zero.

Maintenance

Your Twin Beam Height Gage requires little or no maintenance. For the best accuracy and smoothest function, always keep the tool clean. If necessary, use a very small amount of highly refined oil on a soft cloth to clean metal surfaces making sure to avoid the racks on the inside surfaces of the beams. Isopropyl alcohol may be used to clean the bottom of the base and the upright beams. If the rack teeth must be cleaned, a soft wire or plastic bristle brush may be used. Flashing or no display is usually an indication of low battery power. Replace the battery with a fresh one.



Specifications

Measuring Range:	0 - 12"/300mm, 0 - 24"/600mm
Operating Temperature:	0 - 40°C, Relative Humidity < 80%.
Storage Temperature:	- 20° - 70°C
Resolution:	0.001"/0.01mm
Repeatability:	0.001"/0.01mm
Accuracy	
0 - 12" model:	± 0.0016"/0.04mm
0 - 24" model:	± 0.002"/0.05mm
Maximum Measuring Speed:	Using the handwheel only = approx. 2"/50mm per second
Battery:	Silver oxide, 1.5V button cell (SR44, 357)

